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FACTS AND OBSERVATIONS RELATING TO AGRICULTURE & DOMESTIC ECONOMY.

The American Farmer of August 30, 1822, contains a letter from Professor Green, of Nassau Hall, Princeton, N. J. on the insect, commonly called the Hessian Fly, and a fly called Ceraphron, which sometimes destroys the Hessian Fly, in which are the following remarks:

"I fear the amateurs of Natural History will be able to assist but little in the extermination of so formidable an enemy to our wheat crops, as the Hessian Fly. If the devastations made by this insect are ever arrested, it will in all probability be done by the practical farmer."

"There is a curious fact connected with this subject, not generally known to farmers, and which has led to some little mistakes. There is a fly, called the *Ceraphron*, by naturalists, which is often seen in swarms among the wheat about the same time the depredations are made by the Hessian Fly. This insect is not quite so large as the other, and may be distinguished from it by the wings, which are four in number; the common fly being furnished with two only. The Ceraphron, so far from being injurious to the crops, is a great protection to them; for it deposits its egg within the body of the larva or germ of the Hessian Fly, which it eventually kills for its own support; so that whole crops of wheat which might otherwise have been destroyed are thus saved. After the ceraphron has deposited its eggs, their wings are thrown off, so that it appears like the common ant; and this curious fact has led many to believe that the Hessian Fly is nothing more than a species of that insect."

VIRTUES AND USES OF ELDER.

Extracts from Pomarium Brittanicum, an Historical and Botannical account of Fruits known in Great Britain—by Henry Phillips.

"Sir J. E. Smith has remarked, that this tree is, as it were, a whole magazine of physic to rustic practitioners.

"The bark, leaves, flowers and berries, are used with advantage in medicine. The leaves are said to be purgative and emetic, and are applied externally for the piles and inflammations; an ointment is made also with them as well as the flowers; the latter are used inwardly as a carminative.* Infusions made from the flowers while fresh, are gently laxative and aperient;† when dry they are found to promote the cuticular secretions,‡ and to be particularly serviceable in erysipelatous and eruptive disorders.§ Sydenham directs three handfuls of the inner bark to be boiled in a quart of milk and water, till only one pint remains, of which one half is to be taken at night and the other in the morning; and this repeated every day for those afflicted with the dropsy. Boerhave recommends the expressed juice of the middle bark, given from a drachm to half an ounce, as the best of hydragogues,* when the viscera are sound.

"Elder-flower water, the oil of elder, and elder-syrup are also used as medicines.

"The berries are esteemed cordial, and useful in hysteric disorders; and are often put into gargarisms for sore mouths and throats.

"The fungous excressences, which are often found growing on the trunk of the elder tree, bearing the resemblance of an ear, black in the inside, and of a whitish color on the outside (called *auriculæ Judæorum*†) are accounted good for inflammations and swellings of the tonsils, sore throats and quinsies.

"The wine made from elder berries is too well known by families in the country to require any encomiums; it is the only wine the cottager can procure, and, when well made, is a most excellent and wholesome drink, taken warm before going to bed. It causes gentle perspiration, and is a mild opiate; and may be taken safely, and with advantage, by those of costive habits.

"If a rich syrup be made from ripe elderberries and a few bitter almonds, when added to brandy it has all the flavor of the very best cherry-brandy.

"The white elder berries, when ripe, make wine much resembling rich grape wine.

"The buds and the young tender shoots are greatly admired as a pickle.

"The leaves of the elder tree are often put into the subterraneous paths of moles, to drive those noxious little animals from the garden. If fruit trees, flowering shrubs, corn, or other vegetables, be whipped with the green leaves of the elder branches, insects will not attack them. An infusion of these leaves in water is good to sprinkle over rose buds, and other flowers, subject to blights and the devastations of caterpillars."

* Wind-expelling, and promoting insensible perspiration.
† Opening.
‡ Separation of fluids from the skin.
§ Diseases of the skin.

* Medicines which purge watery humors.
† Jews Ears.

FATTENING HOGS.

Steam or boil potatoes with oats or pea meal and while hot pound or mash them fine, and have several tubs or vessels to receive them in. Before they are given to swine let them become thoroughly sour, and they will cause them to fatten much faster, and on a less quantity than when they are fed with food which has not fermented and become acid.

RULES OF HUSBANDRY.

Extracts from an Address to the Essex Agricultural Society, by Andrew Nichols, Esq.

1. Cultivate no more land than can be thoroughly ploughed, well manured at once, and kept free from weeds.

2. Never keep land many years under the same crops.

3. Never lay land into grass, except it be well prepared, and in a very rich condition.

Suppose for example you possess a field of arable land, containing eight acres; how can it be most advantageously managed? According to the author who lays down the foregoing rules, plough up annually, in autumn, two acres. Let it be cross ploughed, harrowed, highly manured, planted with corn or potatoes, and well tended the following spring and summer. In the spring next following, plough it twice, and sow it with grain and clover. In this way, by keeping the land in rotation, one year under Indian corn or potatoes, one year under English grain, and two years under clover, it would produce the most abundant crops, and be continually growing better, as the large tap roots of the clover especially would greatly ameliorate and enrich the soil. After going through this routine several times, the land would be in an excellent condition to lay into grass, thus to remain till another portion of land could be treated in the same manner. Keeping in view these principles, every farmer can readily apply them to other crops, which it is therefore unnecessary to mention.

IRRIGATION.

Falls of water have been estimated in England to be worth as much for watering the land, as for mills and factories. It is well known that even the temporary streams formed by the melting snows in the spring, if caused to run a few weeks over dry, gravelly soils, will render them highly productive of grass the whole season. Yet our brooks and rivulets are suffered not only to run to waste, but even to render barren extensive tracts of land in their vicinity.—Wherever there is a fall of water running through land suitable for the purpose, let it be divided, and carried as high on each side as it will run freely; throw the intermediate space into ridges about twenty feet wide; along the top of each let a small stream of water be passed occasionally; give the whole a dressing of ashes, or lime; and it will produce the most abundant crops of grass, without any further expense. Admitting therefore that the expense of preparing land in this manner should amount, in the first instance, to an hundred or even to two hundred dollars an acre, it would still prove cheaper than most mowing land which can be kept productive only by frequent expensive manuring. Such land would contribute the whole of its productions to enrich the other parts of the farm; a consideration of no little importance in estimating its value.—*ibid.*

THE WILLOW.

Advantages may be derived from planting low, rocky or boggy lands, which are generally covered with alders and other useless bushes, with common willows. These trees not only produce wood, (which when dried is better than white pine,) faster than other trees, but greatly meliorate boggy soils, and bring in a better kind of grass, which makes excellent pasturage.—They serve to shelter the cattle, while feeding, from the exhausting effects of a burning sun. They prevent rapid evaporation, and probably attract showers; consequently increase the size of adjacent streams, and thereby fertilize soils far beyond the reach of their shadows. Besides,

whatever grows out of the soil ultimately returns to it again, to afford food for other plants which succeed. Consequently the more any soil can be made to produce, the more that, or some other in the neighborhood, will be enriched. Do any doubt the correctness of these theories? Why has Palestine, or the holy land, which once flowed with milk and honey, and supported by its own produce, on an extent of territory not exceeding that of Massachusetts, seven millions of people, become so barren as scarcely to be able to preserve a few thousand miserable wretches? Why has the river Jordan, once, undoubtedly, a noble stream rolling thro' fertile vallies, been reduced to a small brook, winding its way through a sandy desart? You will perhaps answer, the malediction of the Most High rests upon it. True, but the Almighty effects his purpose through the agency of natural causes. It was overrun by victorious armies, and vegetation was destroyed; exposed to the direct rays of the sun, the soil itself disappeared, the springs were dried up, and fertilizing showers became less and less frequent. The same process is now going on in our naked pastures, many of which, that a few years since were well clothed with grass now produce little or nothing but moss.—*ibid.*

Farmers generally would make their pursuits more profitable if they were careful to send to market the best articles, in the neatest order. Good butter, good cheese, good fruit, good cider, good pork, beef and mutton, will always sell, even when the market is glutted with inferior kinds of the same articles. The difference of the expense of raising or preparing the best, and the more ordinary kinds of these commodities, is often very trifling. The butter, for example, offered for sale, is often bad, rancid, and almost worthless. Yet such butter costs almost as much, perhaps often more, than it would to have made it of the best quality. Butter should always be made, salted and preserved by rule. Despise not, therefore, directions on this subject found in books; for it is impossible always to make good butter, if it be carelessly worked over, and salted as chance directs. The difficulty of making good butter, and of sending it uninjured to the market, in the hottest weather, may be easily obviated. For, with very little trouble or expense, ice may be kept in a common cellar the whole season.*

By selecting good, sound apples, and properly managing the liquor during and after fermentation, CIDER can be made without addition, possessing a fine flavour, and in strength equal to about one fourth its quantity of proof spirit. By the addition of about twenty pounds of sugar to a barrel of common cider, as it comes from the press, it will fine itself, keep for years, even on the lees, without souring, and be much improved in strength.—*ibid.*

* In the middle or one corner of the cellar may be built a bin. Throw down some boards, and cover the bottom with straw; or, what is better, the spent bark of tanneries, generally known by the name of tan, in sufficient quantity to leave it a foot in thickness under the necessary pressure. In the month of February or March, go to the most convenient pond of fresh water, and obtain a sufficient quantity of ice, cutting or sawing it up in blocks as large as can be conveniently handled, and pile it up as compactly as possible in the bin, leaving a space of one foot or more all round it; fill this space, and cover the whole with tan or straw, and the ice, unless the celler be uncommonly open, will keep the whole summer. Two men, and one pair of oxen, will perform all the labour necessary to lay in such a store of ice in one day. Around this ice let the pans of milk be set, and place the pots of cream and butter upon it. Place two or three pounds of ice in each box when the butter is conveyed to market.

CATTLE SHOWS, &c.

NORTHAMPTON CATTLE SHOW.

The Hampshire Gazette of the 30th ult. contains the General Report of the Executive Committee of the Hampshire, Franklin and Hampden Agricultural Society, respecting the late Cattle Show. It occupies almost seven columns of the Gazette. We can only give the following abridged sketches of its contents.

The premiums awarded the present year, including those awarded upon Horses at a meeting of the Executive Committee in the town of Greenfield, in the month of May last, but without reference to those offered for the greatest quantity of grain and other articles of produce upon a given extent of land, are one hundred and sixty-six, and amount to seven hundred and thirty-six dollars. The committee on Manufactures was composed of Gen. Jacob Bliss, Col. James Shepherd and Mr. Erastus Clarke. The two former only attended to the discharge of the duties assigned them, the latter gentleman being absent.

The first objects of premium referred to that committee were blue woollen cloths, and woollen cloths other than blue, both required to be 3-4 of a yard in width, and cassimeres. Upon these three descriptions of articles, eleven premiums were offered, and seven only awarded. Thirteen specimens were exhibited, and six excluded from consideration of the committee in consequence of their deficiency in width. Of twelve pieces of undressed flannels likewise only two pieces were of the requisite width, and only two premiums awarded, though five were offered. Those undressed were required to be five quarters, and those dressed 5-8 of a yard. The sub-committee recommend the weaving of flannels for fulling at least five quarters wide, and remark that by weaving our flannels of that width we gain 20 per cent. in the operations of weaving and dressing, and at the same time great advantage in the facility and saving with which it is worked. Of dressed flannels five specimens were presented, and two premiums awarded. The two which were denied the premium were left out of consideration, in consequence of their want of width.

Of the linen sheetings, shirtings and diapers exhibited, the committee speak in terms of high commendation. Upon these three different kinds of articles 19 premiums were offered, and 47 specimens presented. The committee awarded a number of small gratuitous premiums upon specimens of webbing, linen hose, silk hose, travelling trunks, chairs, merino wool hats, and other small articles, such as a screw plate, guage, and a number of hammers, all beautifully wrought. They also awarded a small premium to Mrs. Chloe Strong, a venerable lady, more than 80 years of age, who offered for exhibition eight pieces of linen sheeting, containing 42 yards, all spun and wove by herself.

The committee speak in handsome terms of an invention of Mr. Cotton White, of Hadley, for making handles to corn brooms, by means of a hollow auger—of Teapots from the pottery of Messrs. Crafts, White, & Co. of Whately—of various and rich specimens of Cabinet Work presented by Messrs. Judd & Cook, Beach & Loveland, and Pomroy & Barns, and awarded gratuities to their proprietors.

Very nice specimens of Straw Bonnets were exhibited, and one of grass, in imitation of the Leghorn flats was highly spoken of.

The display of Cattle was unusually fine—that of grass fed cattle superior to the exhibition of last year in that department. The cattle were generally of the breed of the country, of fine form, and in excellent condition. The whole number exhibited was seventy head, and though a number were rejected in consequence of not being exclusively grass fed, the committee state that there were many for which premiums were not awarded, richly entitled to them, had any further premiums been announced. The committee likewise make favorable mention of a "beautiful red heifer," exhibited by Mr. George Bridgman, of Northampton—of the number, beauty, activity and strength of the working cattle, particularly a yoke owned by Mr. Ephraim Arnold, of Belchertown.

The Committee upon Sheep, in announcing the principles upon which they have proceeded, remark that the breed of Merino Sheep is valuable chiefly for its wool; not that these animals are inferior to the native sheep for the use of the table, as they may, undoubtedly, be grown to nearly if not an equal size with sheep of that description. But the quality of the wool deteriorates, as the condition of the animal, beyond what is termed good store order, is improved. The committee looked chiefly, therefore, to the *quality* of the fleece, its *fineness*, its *softness*, and its *uniformity*, and next to its quantity, giving to the finer fleece the preference, although the coarser one might have been more abundant—they desire to give in their report, prominence to the fact, that sheep bearing wool of fine harle, and *short*, instead of long staple, are the best. They likewise regret that there was so little competition for the premiums offered for native sheep.

The Ploughing Match was attended by a great concourse of people. Eight ploughs were entered, and four oxen and fifty minutes allowed to each plough for the performance of the work; the land to be ploughed was one-fourth of an acre. The committee report that the ploughing by the various competitors was unusually good.

The Committee close their Report with the following important remarks:

"By the law of 1819, each incorporated Agricultural Society, within the state, which raises by the subscription of individuals a capital stock of one thousand dollars is entitled to receive in the month of October annually, from the public treasury, the sum of *two hundred dollars*, and a proportionate sum, also, for any further addition, by subscription, to its capital stock; provided, however, that no society shall be entitled to receive, during any one year, any greater sum than *six hundred dollars*. Upon an inspection of the Treasurer's books, it appears that the capital stock of this society amounts to *three thousand nine hundred and seventy five dollars*; entitling us, of course, to receive yearly $600 from the state treasury, and giving us, with $172 payable annually by 86 annual subscribers an income of $1010 50. The statute containing the

above provision was passed in February 1819, and being limited to the term of *five years*, will expire, if not renewed, in February, 1824. The question will soon arise, therefore, as to the propriety of re-enacting or continuing in force the provisions of the act referred to; and it is not unlikely, before that period arrives, that the public sentiment upon this subject will have been distinctly ascertained and expressed.

"It is sometimes remarked, by casual observers, that our cattle shows, with all their imposing pageantry, are calculated merely for the *amusement* of the public, and do not, in any considerable degree advance the interests even of that class of our citizens, for whose immediate benefit they were first established, the agriculturists.

"However little there may be, either of truth or justice in the suggestions we have mentioned, it is, nevertheless, to be remarked, that the objection, even if correct, would impeach, not the wisdom of the legislature, to whose bounty it is owing that we are able to distribute so large a sum in premiums, nor the public spirit or distinguished liberality of those citizens, to whom we are indebted for the means of becoming the objects of that bounty, but only the discretion or sound policy of the officers, or those who are entrusted with the control of the affairs of the societies themselves.

"The great mass of the people of Massachusetts are either husbandmen, practical agriculturists, or artisans and mechanics, either partially engaged in agricultural labors or immediately dependent upon the cultivators of the soil for encouragement in their different occupations and the means of subsistence. Upon the sea board, it is true, we find multitudes, who having their farms upon the ocean, either in their own persons or through the instrumentality of others, gather from its furrows the sources of wealth. As it respects however, the great body of the population of New-England, four-fifths probably of her citizens are mechanics and farmers. And is it possible that societies like ours, instituted expressly for their encouragement, with an income throughout the commonwealth of many thousands of dollars, can do nothing for the great interests of manufactures or agriculture? And when too the perpetually varying wants of man, real or imaginary, are incessantly calling for improvements in the one, and the earth, with its stores of wealth, is for ever inviting new efforts for their developement through the agency of the other?

"Agricultural Societies, as it respects this state, may be considered, for the most part, as of very recent origin. Their growth, it is true, has been rapid beyond example, and if they are as yet destitute, in some degree, of the healthy action and athletic vigor of mature life, they are rather to be fostered as children of high promise, than reproached for not possessing in youth all the characteristics of manhood. Perhaps at some future period, experience may dictate improvements in the distribution of our funds. While a portion of them is reserved for the objects now kept in view, a part may be appropriated to the encouragement of the efforts of genius in the invention of new modes of applying advantageously the mechanical powers, or in aid of societies or individuals, who may be engaged, with a prospect of benefit, in the investigation of the nature of soils. Suitable rewards may be held out for the prosecution of botanical, mineralogical, or geological researches. In process of time, indeed, such may be the character of the society, and such the correspondent progress of intelligence on the part of its officers, and munificent liberality on the part of its members, that the benefits, resulting from the institution may be too obvious to escape the acknowledgment of the most incredulous, and too intimately connected with the best interests of the commonwealth to require a single effort to secure for it the cordial and hearty and permanent co-operation of the public.

"The members of the society will suffer us to remind them, to whose beneficence we are indebted, as well for our beautiful scenery, fruitful soil, and exuberant crops, as for the various institutions, of a civil and religious nature, which have given to New England its high pre-eminence; and as we view with that complacency of feeling, which even the *Christian* patriot may indulge, the inheritance which has been transmitted us, or the store houses and barns our own industry may have filled, let us remember with humble gratitude, Him who was our father's God, and to whose kindness it is owing, not only that *our pastures are clothed with flocks, and our vallies also covered with corn*, but that our institutions are unimpaired, and our prosperity and happiness, as a people, unexampled.

From the Connecticut Courant.

GRANBY, (*Turkey Hills Society*) Oct. 23, 1822.

Agreeably to previous appointment, the Cattle Show and Fair was attended at this place. The working oxen and steers in yokes, were collected on the green near the Meeting-house, at 10 o'clock, A. M. There were present 36 yokes of 5 years old—37 of 4—75 of 3, and 37 of 2 years old; in the whole 175 pairs. They were all in good working order, and generally well matched. After an appropriate Address, delivered by Mr. Alfred Owen, to a numerous auditory in the Meeting-house, the whole of the cattle, by assistance of the marshals, were connected in one line, making a team of a full half mile in length. In this order they moved about three-quarters of a mile on to a beautiful plain lot in Windsor, belonging to Isaac Owen, Esq. where they were formed into a hollow square, exhibiting a parade novel and highly interesting. The Committees of arrangements and inspection, with their Secretary, accompanied by several gentlemen of respectability from neighboring towns, were conveyed to the parade ground, (not in *coaches* with *sixes*,) but in two substantial *carts*, fitted up with benches, and drawn by three hundred and seventy oxen and steers, in a style vastly superior to monarchs and their minions.

The committee of inspection, as well as many spectators, viewed with pleasure the great improvement visible in the beauty and quality of the cattle, since the last annual Show, in Oct. 1821. Much praise is due to the owners and drivers of the cattle, for the laudable spirit manifested, and for the good order preserved by them.

Among so many fine animals as were here exhibited, the inspecting committee felt a degree of delicacy in making very great distinctions between several pairs of superior excellence. They were, however, of opinion, that the most meritorious of those exhibited, might be presented in the following order:

Best pair working oxen, 5 years old, owned by Joab Owen, of Suffield.				
2d	do.	do.	do.	Col. T. Leavitt, do.
3d	do.	do.	do.	Henry Owen, do.
Best	do.	do.	4 do.	J. Cornish, Jr. Windsor.
2d	do.	do.	do.	P. Stevens, Southwick.
3d	do.	do.	do.	J. Forward, Granby.
Best	do.	do.	3 do.	Apollos Gay, do.
2d	do.	do.	do.	E. Thompson, Simsbury.
3d	do.	do.	do.	B. Griswold, Windsor.
Best	do.	Steers,	2 do.	Col. S. Clark, Granby.
2d	do.		do.	E. Sheldon, Suffield.
3d	do.		do.	R. Barker, Granby.
Best	do.		1 do.	E. Bates, do.
2d	do.		do.	John Viets, do.
3d	do.		do.	Joel Clark, do.

Much gratification was afforded upon the occasion, by the attendance of several gentlemen of distinction from different towns in the county.

It is believed that exhibitions of this nature are well calculated to excite a spirit of emulation among agriculturists, and to improve our stock.

It is thought worthy of notice that James Forward, Esq. exhibited a water-melon raised in his garden this season, the weight of which was 47 pounds, when taken from the vine.

Mr. Atkins' method of preserving Iron and Steel from Rust.

Greasy and oily, or resinous substances, have hitherto formed the basis of the different preparations proposed and employed for this purpose; but in the former, when rancidity comes on, an acid is produced, which corrodes the iron; and the latter, when dry, are apt to crack, and thus afford an inlet to moisture. But melted caoutchouc, or India rubber, Mr. Atkins has found to possess peculiar advantages in preserving the surface of iron from being acted upon by the atmosphere, arising from its little susceptibility of chemical change, when exposed to the air; from its treacly consistence under all ordinary temperatures; from its strong adhesion to the surface of iron or steel: and, at the same time, from the facility with which it is removed by a soft brush charged with warm oil of turpentine. The finger or a soft brush are the most convenient implements for applying the caoutchouc; and, as soon as the article has been covered, it ought to be set up on end, in order that the excess may drain which will take place in a day or two. The temperature for melting caoutchouc is nearly equal to that required for the effusion of lead.—*Monthly Mag.*

New method of Weaving Mats.

This method consists in disposing in a cheap and coarse kind of loom, a double series of plain and colored lines of longitudinal stripes of twine—the stripes being at intervals considerably apart from each other. These threads of twine being opened in the manner of a warp, by means of the treddles and harness of the loom, either Dutch rushes or the leaves of *Typha latifolia* or greater cat-tails, torn into shreds, are to be introduced from time to time, with a wooden needle, having an eye or opening at one end of it to receive the rushes, to form the shoot, and the twine is closed over them by the continued action of the loom. In this manner, a cheap and useful matting is fabricated, the use of which is now become very considerable amongst us, although the invention is of a very recent date.—*English paper.*

MASSACHUSETTS AGRICULTURAL JOURNAL, FOR JUNE, 1822.

(Continued from p. 85.)

A letter from John Prince, Esq. of Roxbury, to the Committee on Agricultural productions, dated Nov. 1821, states the following facts, viz. That Mr. Prince kept a large stock for the size of his farm, which is small, his house lot only 57 acres, and was therefore induced to raise largely of roots. The quantity, however, is smaller than he had last season from the same quantity of land under cultivation, owing, as Mr. Prince supposed, to its being principally from pasturage, newly broken up. The productions of the fifty-seven acres were 800 hills of summer squashes (on less than half an acre) which yielded largely, and were daily gathered for a long time, and boiled for a large stock of swine, with the thinnings of mangel wurtzel, &c. &c.—657 bushels of mangel wurtzel at the harvesting, besides a large quantity of thinnings, during the season, and also of leaves at harvest given daily to cows, swine, &c. cost seven cents per bushel. Mr. Prince says, "I think a greater quantity of this root can be raised on suitable soils, than of any other vegetable, requiring not more than one third of the labor that *carrots* do. —400 bushels carrots, on same space of ground adjoining the preceding crop; cost 17 2-3 cents per bushel—537 bushels ruta baga; 3-4ths of them were raised on land broken up the same season, and the sods burnt by an Irishman acquainted with the business, and no other manure on the three-fourths; the cost 8 2-3 cents per bushel; were sown the 29th June, too late by a fortnight, but the land could not be got ready sooner—745 bushels of potatoes, besides early ones, used during the season; they were of 13 different sorts, and cultivated by Mr. Prince for the purpose of selecting the most valuable. The best were the *Elam* potatoe from Rhode Island, and are uncommonly fine. The second best from Gen. Derby, of Londonderry, N. H. and supposed to be the Buckman potatoe from Maine, a new sort. The third from Hamburgh, imported by T. B. Wales, Esq. are very fine and yield well. There were so many sorts, and planted on so many spots, that it was impossible to keep the costs—15 bushels of sweet potatoes of very good quality, and the cost of cultivation not more if so much as others; they yield more from the same number of hills, and do best on light sandy land—37 bushels Russian radish, the produce as large as any vegetable Mr. Prince ever raised; some of them weighing fourteen pounds; they keep well through the winter; cattle are very fond of them, and the thinnings were boiled, among other vegetables, for swine. Gen. Derby, of Londonderry, has this year raised more than one thousand bushels altogether on his cornhills (one each) and he thinks it no injury to the corn; they do not seed the first year, like other radishes, but must be cultivated like turnips—400 bushels turnips of different sorts; some of the yellow Aberdeen, from Mr. Young, of Halifax, thought to be the best of any for the table, and keep well; some red tankard and white Norfolk. All were *imported* seeds, and not sown till the last of July, and principally on burnt soil. I find, says Mr. Prince, when English turnip seeds are used, they should be sown from two to four weeks earlier than our own old fashioned sorts, as the tops grow very large, and the roots do not begin to swell till the tops are nearly done growing.—Cabbages, a considerable quantity, but did not head well; the soil too dry for them. Besides a considerable quantity of vegetables from a large garden, not more than two hundred bushels have been, or will be disposed of otherwise, than for the use of the farm. Last winter I kept in pits near one thousand bushels of Ruta Baga and Mangel Wurtzel, which did so well, that this season I have nearly as many. The trench dug about one foot deep, and four feet wide, and long enough to contain one hundred and fifty or two hundred bushels each: they are then piled about 3 1-2 feet like the roof of a house, covered eight or twelve inches with straw or meadow hay, and then with the earth thrown out of the trench and enough added to make it, when the weather becomes quite cold, about a foot thick. Be careful not to cover too thick *at first*, as the heat of the vegetable is great, when confined in so large a body, and would destroy them."

Mr. John Dwinell gives a statement of the cultivation of a lot for a premium crop of potatoes.

"The lot is situated by Bridge street, so called, in Salem, county of Essex, and owned by Messrs. Waitt and Pierce. It was broken up in 1819; soil black, low and heavy. For about twenty years previous to which, it had been mowing land. The last year potatoes were raised on the lot, nine cart loads of barn manure, about twenty bushels white seed potatoes, and whole labour then employed in production of crop, nineteen and an half days.

The cultivation, &c. the present year has been—1st. Four loads of barn, and five of privy manure, for one yoke of oxen, were put on the lot.

2d. The seed, an equal portion of whites, blues and long reds, making in all about twenty-four and an half bushels.

3d. Two days ploughing and half a day furrowing, with one yoke of oxen, no driver; 17th and 19th of May, three days planting; 14th June, three and an half days weeding; 16th July, 3 days hilling; and from 1st October, ten days digging crop, making in the whole twenty-three days labour.

4th. The amount of crop measured five hundred and eighteen and an half bushels on the acre."

Thomas Shepherd, Esq. of Northampton certifies, in substance, that on the 16th Oct. 1821, he measured an acre of ground, across the end of his cornfield, had the produce threshed on the first day of the Cattle Show, brought it to the Show in the afternoon, and sold it under the inspection of hundreds of people. The corn was perfectly hale and dry, and measured 87 bushels and 24 quarts, all produced from one acre of land sowed in rows about four feet apart. The same gentleman caused an acre of land adjoining the above to be measured off, which was sowed in alternate rows of corn and ruta baga; the corn rows being eight feet apart. The produce was sixty-one bushels and twelve quarts of corn, and one hundred and sixteen bushels of ruta baga. The whole field of nearly twenty acres (except the first acre) was sowed in rows eight feet apart, and the half acre, which yielded 61 bushels and 12 quarts, was not better than a fair average of the field. The ruta baga sowed between the corn rows was almost burnt up with the drought. The first acre was entered for the Society's premium of $30, for the greatest quantity of corn on an acre, and the second acre for the premium of $30, for the best mode of raising corn. The land was dry and the corn *suffered much* from the drought. The field contains nearly twenty acres, which with four others of about the same size is cultivated under a five years' rotation of crops without manure, except the corn year, when it is spread on profusely. It had lain in grass (without any manure being put on it) three years, when it was ploughed in the fall, and manured in the spring at the rate of nearly fifty loads to the acre, taken fresh and green from the barn yard and pig stye, and all made during the winter (except some heaps of compost not very good) by the cattle, sheep and pigs, from straw and oats mixed with the stable manure; the land was cross-ploughed an inch or two deeper than the fall ploughing; the manure covered up as fast as it was spread about from the carts; the turf harrowed fine with light seed harrows; the land furrowed back to back in ridges four feet apart, the tops of the ridges being two feet higher than the bottom of the ditches. The land was then harrowed across the ridges, which filled up the ditches with fine rich mellow earth a foot deep, well mixed with manure, in which the corn was carelessly strewed along *very thick*, sprinkling gypsum on it before covering it up. The corn was sown between the 10th and 26th of May, was hoed three times, beginning the first week and ending the last week in June. Mr. Shepherd concludes this article as follows:

"I have tried every plan for several years past, and this is the third year that I have sowed it in rows from six to eight feet apart, with a variety of roots and plants between them. The first year I got 44 1-4 bush. to the acre, or rather from half an acre; the second year 50 bushels, and this year 61 bushels 12 quarts. It is my belief that 75 bushels corn and 3 or 400 bushels Ruta Baga (or 2 or 300 bushels potatoes) can be raised on an acre of good rich ground cultivated in this way; but the corn must be sowed *very thick* in rows eight feet apart, and the ditch well filled with fine mellow earth, and *plenty of manure*, nor is it an expensive mode of culture considering the great crop to be obtained. The cross ploughing and furrowing is extra work, but this it is, with the aid of the harrows that makes the great crop, if sowed in wide rows, as my experiment this year proves, having got at the rate of 122 bushels 24 quarts to the acre in this way, and in the narrow rows, with more exhaustion of the land, only 87 bushels 24 quarts. With regard to the expence of cultivating a single acre of land, the Trustees will please to consider that I do not cultivate any one acre of land with a view particularly to a premium, and therefore cannot ascertain the expence. I would observe however that the extra expence of cultivating corn in this way beyond what it is in the usual way in hills is inconsiderable. They will also decide which of the two is most meritorious, him who cultivates his whole farm alike both as to labour and manure, or him who devotes all his energies to get a great crop, from a single acre, and robs the residue of his farm for the benefit of a premium."

The succeeding articles in this excellent number of the Massachusetts Agricultural Re-

pository are "An Essay on the advantages of manuring with Green Crops—by S. W. Pomeroy, Esq. first Vice President of the Society," which we have republished, (p. 9,) and an article on "The felling of Trees for Timber," by Hon. Timothy Pickering, which we have also republished, (p. 17.)

☞ We have now transplanted into the *New England Farmer*, either in substance, or at length, every article in the last number of the Massachusetts Agricultural Repository, whose more general diffusion we thought might be useful to that numerous and respectable class whose principal occupation is cultivating the earth. In doing this we may, perhaps, incur the censure of some of our readers, who were previously in possession of the work, which has been the subject of our notices and extracts. But we believe that more than four fifths of our subscribers do not take the Massachusetts Agricultural Repository, and many of them would, probably, never have seen much of the useful matter first published in that valuable work, had it not been presented to them through the medium of our paper. We are moreover confident that the liberal use which we have made of the Repository will be so far from giving offence to its conductors, that they will approve of our proceeding, as comporting with their own patriotic views and intentions. Dr. A. Hunter, the author and compiler of several volumes of valuable Essays on Agriculture, *invited Editors of Newspapers to make extracts or republish whole articles from his essays*, in order that the public might be the more extensively benefitted by his labors. Utility rather than originality is our object, and we prefer copying a valuable article from another publication, to publishing original matter, written expressly for the New England Farmer, which may have less merit than the article thus copied. We mean, however, always to *give credit*, to the sources or authors from whom we derive our second-hand articles; and if some editors of newspapers (for whom we hope this hint will suffice,) would deal as fairly by us, they would confer an obligation. If certain jackdaws will not be contented with their own feathers, we will not promise not to divest them of their stolen plumage. We shall handle them with as little ceremony as a hawk would a robin.

To the Editor of the Utica Gazette.

SIR—A friend has furnished me with the following account of a very extraordinary crop of corn raised on three acres of land, by Messieurs J. and M. Pratt, of Easton, Madison county, for which they received a premium from the Agricultural Society. The character of these gentlemen, as well as the exertions of a respectable committee to ascertain the truth, preclude all doubt of the correctness of the statement. The effect is unexampled in this county, and I hope it will not fail of convincing many of our farmers that they have mistaken the true source of agricultural profit, and that it may excite in them a laudable spirit of emulation. If, under a better course of husbandry, we could raise from 50 acres as much produce as we now do, under the present system, from 150 acres, lands would become more valuable and the benefit generally would be incalculable. I understand Messrs. Pratts feel confident, from the result of this experiment, that they can, in a good season, raise 200 bushels to the acre, and that they hope to do it next year.

A FARMER OF ONEIDA.

STATEMENT.

Dr.	Interest on value of three acres, at 20 dollars per acre		$4 20
	Manure, $15 per acre		45 00
	Ploughing and dragging three times		16 50
	Seed		75
	Planting		7 50
	Hoeing		10 50
	Gathering		15 50
	Topping stalks		6 00
			$105 95
Cr.	Corn from 1 ac. 172 1-4 bush.		
	do. do. 161		
	do. do. 161		
		494 1-4	
	Deduct 10 per ct. for shrinkage	49	
	Bushels 445 1-4 at 37 1-2 cts. per bush.		$167 06
	2355 bundles stalks at 1 ct. each		23 55
	Offered for but-ends and husks		10 00
			$200 61
	Deduct		105 95
	Net profit from three acres		$94 66
	Or $31 55 per acre.		

From the Farmer's Weekly Messenger.

It appears by experiments made in Pennsylvania, that potatoes and corn given in a raw state are inferior to the same quantity when ground, boiled and steamed, forty-five per cent. i. e. if a hog weighs three hundred, and it cost half to fat him with ground corn, and he is sold for four cents, in the one case it will cost six dollars to fat him, and in the other case it will cost eight dollars and seventy cents. If he that sells his pork, when fatted on the best terms, only lives by it, the man who feeds on whole grain must shortly expect the officer after him. It is believed that there is more difference than even the above.

A discovery has been recently made, which promises the most important consequences in a commercial and agricultural point of view.—About two years ago, 200 acres of land, near Flint, in Wales, were planted with the common holyhock or rose mallow, with the view of converting it into hemp or flax. We have been informed, that, in the process of manufacture, it was discovered that this plant yields a beautiful blue dye, equal in beauty and permanence to the best indigo. We relate the circumstance precisely as we have heard it from the most respectable quarter, without pledging ourselves to the fact.—*Liverpool Kaleidoscope.*

From the American Centinel.

TO MY BROTHER FARMERS.

I am sorry that there is so much need of the admonitions I am about to give. Depend on it you do not "*work it right*," or you would make your farms and stocks twice as profitable as they now are. Many of you *farm too much.* You would find it much more profitable to farm twenty acres well than forty by halves. The last season, I made ground produce at the rate of one hundred bushels of Indian corn to the acre. Is not this much better than a common crop of 30 or 40 bushels? You will most certainly say it is, and with the same breath ask how I managed to make it produce so plentifully? My ground being much infested with ground mice, or moles, and also overrun with grubs and other vermin, I put on, early in the month of March, about seven bushels of salt to the acre, which thoroughly destroys all kinds of vermin, being an excellent manure; early in April, I gave it a good coat of stable manure, and ploughed and worked the ground over and over, until it became completely mellow; I then had every corn hole filled with hog manure, and after dropping my corn, which had been previously soaked in warm water, I scattered a pint of lime over every hill, and then covered the whole with a little mellow earth. In about one week the corn began to come up plentifully, after which I nursed it well with the plough and hoe every other week for eight weeks, at which time it was as high as my head, and not a spire of it was destroyed either by the frost, grub or birds. My other things I nursed equally as well, and I have been amply paid for all my extra care and trouble, as I raised more than twice as much per acre as any of my neighbors, and did it in much less time—I mean I got all my harvesting done two or three weeks before many others. This is accomplished in a great measure by redeeming time; rising between 3 and 4 o'clock in the morning; then if the day be very sultry and hot, I lie by from 12 to 3, and then I feel refreshed and able to go to work until quite dark—this I call '*working it right.*' Whereas, should I lay in bed until the sun be up and *shame me*, haunt the taverns at night, drink too much whiskey, but half manure, half plough, half plant, half nurse, half harvest, and do every thing else by halves, I surely should not '*work it right*,' nor get half a crop.

I shall now conclude, by giving you, for further consideration, a few excellent observations from a wiser head, perhaps, than my own, which I shall endeavour to improve for myself, and hope every brother farmer will do so likewise, viz:—

I often say to myself, what a pity it is our farmers *do not work it right.* When I see a man turn his cattle into the road to run at large, and waste their dung, on a winter's day, I say this man *does not work it right.* Ten loads of good manure, at least, is lost in a season, by this slovenly practice—and all for what? For nothing indeed but to ruin his farm.

So, when I see cattle late in the fall, or early in the spring, in a meadow or mowing field, poaching the soil, and breaking the grass roots, I say to myself, this man *does not work it right.*

So when I see a barn yard, with a drain to it, I say the owner does not work it right, for how easy is it to make a yard hollow, or lowest

in the middle, to receive the urine and all the wash of the sides, which will be thus kept dry for the cattle.

The wash and urine of the yard, mixed with any kind of earth, or putrid straw, is excellent manure; yet how much do our farmers lose by neglecting these things;—in fact, *they do not work it right.*

When I see a farmer, often going to the retailer's store, with a bottle or jug, lounging about a tavern, or wrangling about politics, or quarrelling with and defaming his neighbour's good name, I am certain such a man *does not work it right.*

A PENNSYLVANIA FARMER.

From the London Globe.

MOST IMPORTANT DISCOVERY.

Six weeks since, application was made to a person for the loan of *one hundred pounds* to a young chemist, who had a discovery he was too poor to substantiate by experiment. The money was obtained, and in a few days repaid by the borrower, already raised to sudden affluence by the private disposal of his invention:—It is a new mode of tanning skins, combining such rapidity and economy, as promise to the publick an immediate and immense advantage. Raw hides, hitherto lying twelve months in the tan pit, and subjected to a process otherwise defective and precarious, are now perfect leather within six weeks, and at less than half the expense. The gentleman who bought the invention, is a noted opposition member and contractor; and from the terms of his stipulation, we may form some judgment of the probable magnitude of the results. He has paid him 10 000*l.* down, he has given obligatory deeds, securing him 5000*l.* on the 1st. of January, 5000*l.* per annum for the four years next succeeding and afterwards 11, 000*l.* a year for life! It is expected the price of a pair of boots will not exceed eight shillings, and a corresponding fall will be produced in all articles of leather manufacture.

From the Philadelphia Union.

GAS FROM OIL.

A company at Boston has established works for making gas, and obtained permission from the city authorities to lay iron pipes from three to four inches in diameter, in the streets, for the purpose of supplying such parts of the town as will receive a sufficient quantity of gas to indemnify the company for the expense.

The gas proposed to be used, is that obtained from oil, which, it has recently been discovered, is far preferable to that obtained from coal.—The apparatus, Professor Silliman states, is much less expensive—occupies much less space—requires less skill and labour to manage it, than the coal gas apparatus—is not so liable to wear and tear—and as there are no offensive products to be removed, it may, on its present improved construction, be introduced into any dwelling-house. All the costly and offensive operation of purifying the gas by lime, &c. is totally avoided when it is obtained from oil.

The material from it is produced, containing no sulphur or other material, by which it can be contaminated, there is no objection, on account of a suffocating smell, to the use of oil gas in close rooms; and, as it contains no unmixed hydrogen (which occasions the great heat of the coal gas,) there is no greater proportionate heat from the flame, than from that of lamps or candles. It does no injury to furniture, books, plate, pictures, &c. and contains nothing which can possibly injure the metal of which the conveyance pipes are made.

AMERICAN MANUFACTURES.

Messrs. Adams, Allen & Co. have lately established in the vicinity of Pittsburgh, a manufactory of cotton yarn and piece goods—the first of the kind which has been established in Pennsylvania, west of the mountains. They have already put into operation upwards of 500 spindles and eight power looms, and are now engaged in constructing 1000 additional spindles, which will be put in operation in the ensuing spring.—These spindles will supply yarn for looms sufficient to weave from 1500 to 2000 yards of piece goods per day. At present, there are about 20 hands employed, principally females. The whole machinery, which is of the latest and most appoved kind, will be driven by a steam engine of about thirty-five horse power.—*ibid.*

SQUIRRELS IN OHIO.

A letter from the Ohio country, an extract from which is published in the Woodstock, Vt. Observer, states that whole fields of corn from 6 to 10 acres, are wholly destroyed by grey and black squirrels—not an ear left. During a squirrel hunt of about a week in the neighboring towns about Columbus, the first part of Oct. nearly 20,000 were killed. Hundreds were seen every day swimming the Great Miami, Mad River, Scioto, and other streams. Children from 6 to 10 years of age, would wade into the shallow water, before the squirrels reached the shore, and kill them with sticks. Many of them are fat and fine eating. We saw many little boys and some men, with from ten to thirty or forty on their backs. They seem to be almost as destructive as the locusts formerly were in Egypt. It is supposed that they are in pursuit of nuts, and attack corn-fields. Notwithstanding the depredations of these animals, corn and oats in many parts of that country are only 12 1-2 cents per bushel; wheat, by the quantity, from 25 to 37 1-2 cents per bushel; butter and cheese from 6 to 10 cents per pound.

The season has been very good in some parts of the Ohio country, but in some parts of Pennsylvania, Virginia and Maryland, almost every thing is destroyed by drought.

Longevity of the Clergy in the Old County of Hampshire.—The following passage of a letter from the Rev. Enoch Hale, of Westhampton, is inserted in the last North American Review:

"When I was ordained (in 1779) there were, including myself, 34 or 35 ministers in Hampshire county. Of these nine are now living, and I am the youngest of the nine. Two are above 75, and have colleagues. Four perform the ordinary ministerial duties, two of them are above 70. One was dismissed and is about my age. In 40 years, only one minister has died, within the present limits of Hampshire county, under the age of 70. Of those who have died within the limits of the old county, (as it was in 1779,) one was nearly 100, three about 90, one 89, eight about 80, and eight about 70."—*Hamp. Gazette.*

THE FARMER.

BOSTON:—SATURDAY, NOV. 9, 1822.

On the Metamorphoses and Manners of the Cock-chaffer Fly, the Scarabæus Melolontha, Lin.; with Hints tending to lead towards some means of destroying it.

PLATE I.

PLATE II.

Plate I. is a representation of a full grown insect. The small dots at the end of each of the vertebræ or joints, are shining specks which are the air holes thro' which it breathes.

No. II. represents the same insect after it has changed to a fly or miller.

The eggs of this insect are deposited by the mother in the ground, from each of which proceeds, after a short time, a small whitish worm with six feet, that is destined to live in the earth under that form for the space of four years, and there undergo all its changes, until it finally assumes its pupa form [form of a winged insect] subsisting, during its abode in the earth, upon the roots of trees and other plants that grow in the soil, committing ravages among these crops, on some occasions, of the most deplorable kind. After it assumes its winged state, it devours the leaves of trees and other plants with an avidity not much less than that of the locust; so that in certain seasons, and in particular districts, they become an oppressive scourge that produces much misery among the people. Fortunately their ravages are but temporary and local, being moderated by circumstances in nature with which we are yet in a great measure unacquainted.

As soon as the worm issues from the egg, it seizes upon such roots as it finds nearest to it, and devours them, living all the summer under the thin coat of vegetable mould, near the surface; but, as winter approaches, it descends deeper into the earth, and, penetrating directly downwards, retires beyond the reach of the frost, where it remains in an inactive state, and without food, till the return of spring, when the warmth of the season invites it to ascend and begin its ravages anew upon the roots that spread themselves through the tender mould near the surface. In this manner it proceeds for three or five successive seasons, changing its skin at least once a year. It is not till the end of the fourth year that the larvæ are metamorphosed; for then, towards the end of autumn, they go deep into the earth, sometimes six feet, and then spin themselves a smooth case, in which, after quitting their last skin they change into the pupa, or chrysalis. The pupa remains under this form all winter, till the month of February, when it comes out a perfect Scarabeus, soft and white. It is not till the month of May, however, that the parts become hardened, and they come out of the earth in the day time; and thus we often find in

the earth perfect cock-chaffer flies; which has made many persons think that these insects live from one year to another, and pass the winter in the earth to protect them from the cold.

These worms, though they are always white, yet are sometimes found varying, more or less, wholly, or in part, into a bluish tint, produced by the internal parts, seen through the transparent skin.

These scarabei are seen during the whole summer, especially towards the end of May, and in June, flying in the evening towards sun-set, particularly where there are trees. They seem to be a heedless kind of animal, that fly briskly without regarding much where they go, and therefore become extremely troublesome to persons who walk in places that they frequent, by their darting frequently, and with force, upon the face and other parts of the body, which, when naked, prove very teasing. They eat the leaves of most species of forest trees, as well as fruit trees.

In the United Provinces of the Low Countries, the children amuse themselves by attaching a long thread to one of the hinder feet, and leave them thus to fly without suffering them to escape; they fly then commonly round, describing a circle in the air; from which some think they have obtained the name of *molinaars*, that is to say, millers; the probability is, however, that they have obtained that name from the greyish hairs, resembling powder on a slight look, or the whitish dust with which their bodies are covered.

The Society of Arts in London has for many years past held forth a premium for the best account of this insect, and the means of checking its ravages, but without having produced one successful claimant.

In order to destroy these insects, some English writers recommend to cherish and protect rooks, magpies and jays, whose sole employment, for some months, is to search for insects of this sort for food.—"A cautious observer, says Dr. Anderson, having found a nest of five young jays, remarked, that each of these birds, while yet very young, consumed fifteen at least of these full-sized grubs in a day, and of course would require many more of a small size; say that on an average of sizes, they consumed twenty a piece; this for the five makes one hundred. Each of the parents consumes, say fifty; so that this pair and family consume two hundred every day. This in three months amounts to twenty thousand in one season; but as the grub continues in that state four seasons, this single pair, with their own family alone, without reckoning their descendants, after the first year, would destroy eighty thousand grubs. Let us suppose that the half, viz. forty thousand, are females, and as it is known that they usually lay about two hundred eggs each, it will appear that no less than eight millions have been destroyed, or prevented from being hatched by the labors of this single family of jays.

These insects afford a most acceptable food to ducks, turkies, and the other inhabitants of the poultry yard, which are remarked to lay a greater number of eggs when thus fed, than at any other time. Swine likewise devour them greedily, if they be first bruised and mixed with their other food.

The ravages of the grub are sometimes not experienced for many years together. At other times they appear in immense numbers, without our being able to assign any reason for it. This is thought to be owing to the long period that this insect lives in its grub state, during all which time it cannot multiply, and must be subject to a variety of accidents that may destroy it, without ever allowing it to come within the reach of our cognizance.

Cabbages, cauliflowers, and strawberries, are all much relished by the grub, but lettuce seems to be its most favorite food. In lands infested with the grub, gardeners sometimes make use of this as a bait to destroy them. They plant a row of lettuce plants between the rows of strawberries. In that case the grub attacks the lettuce. The gardener, aware of this, examines his plants with care each day, going along the rows with a trowel in his hand, and wherever he sees the leaves falling, he knows that the enemy is there, and immediately digs up, and destroys the grub.

It is thought that the whole race of grubs are sometimes destroyed by winter rains; and wherever irrigation takes place, the destruction of the grub must be effected. If a stream of water could be spread over the surface of a grass field only for a few days, during any of the winter or spring months, it is supposed that the grubs might thus be drowned in their holes. Dr. Anderson recommends this mode of destroying grubs, in grass lands which are infested with them, especially when it is intended to turn them up to corn, (wheat, rye, &c.) for the mischief grubs do in these circumstances to the first corn crop is often very great. It might, says Dr. Anderson, even with safety be applied to orchards and wood-lands; for these would sustain no damage were not the water continued longer than is necessary for the destruction of the worm.*

Dr. Darwin says in Phytologia, sec. xiv, 3, in speaking of the Scarabæus Solstitialis, or fern chaffer, "when the fly is seen to come out in abundance in the summer evenings on grass lands and fallows, it is probable that rolling the ground in the evening might prevent the return into the earth, both of these and of the may-chaffers, to deposit their eggs and thus prevent their future progeny; or during their grub state, when they exist at the roots of wheat above, or just beneath the surface of the soil, perhaps slacked lime might be sprinkled over the crop in powder, or sea-salt in powder, which might be washed down the stems of corn in a wet day, and destroy the insect, without injuring the vegetable; or lastly tar water; all which might be first tried on a small part of the field; for as lime is not all of equal purity, it is not all of equal strength or causticity." The same author, in speaking of the white slug in gardens, says, "It has lately been asserted, that watering the ground with tar water will destroy them, which may be made by adding a few pounds of tar to a hogshead of water, and well stirring it, without perceptible injury to the tar." Phytologia, sec. xiv. 3, 5.

There is no doubt but common turpentine might answer as good a purpose as tar, if made use of in the same way. Infusions of elder are likewise, it is believed, fatal to all sorts of insects. Lime water would be a cheap application, and a quart of quick lime would more than saturate a hogshead of water, for lime cannot be taken up or held in solution in less than about 700 times its weight of water. Any of these liquid substances may be applied to a soil infested with worms, either by a common gardener's watering pot, or by letting the liquid out of a barrel or hogshead, by a pipe communicating with a tube 10 or 12 feet in length, with its ends closed, and bored full of small holes five or six inches apart, and placed either before or behind the wheels of a cart, across, or fastened under the body, in such a manner that the liquid may issue through holes and wet the ground equally, as the cart is drawn over it. Or in other words, wet your grounds with lime water, &c. when the grubs are near the surface, by an apparatus similar to that which is used for wetting the streets of cities in hot and dry weather. If such applications should not kill the worms it would probably spoil their appetites, and lime water would, moreover, in many instances, be useful as a manure.

* *This account is principally abridged from a paper in the 3d volume of Anderson's Recreations.*

LATEST FROM EUROPE.

An arrival at New York brings intelligence from London to the 22d and Liverpool to the 24th of Sept. The Greeks are proceeding with rapid and victorious strides to the achievement of complete independence. They attacked the Turks before Argos on the 23d July, and defeated them, after a furious contest. On the 24th and 25th the Turks were harassed on their retreat by the Grecian sharp-shooters. An obstinate battle at length took place, near Corinth, in which more than 1500 Turks perished. On the 6th and 7th of August, likewise, the Turks were defeated with great carnage, 3000 remaining dead on the spot. The number of wounded and prisoners is not known, but two thousand Turkish horses, all their baggage and munitions, together with their military chest were among the fruits of the conquest. Up to the 18th of August, the date of the last accounts, the Greeks were triumphant, and news was every moment expected of the complete destruction of the Turkish army.

In Spain the Constitutional party are successful, and their enemies are submitting or retiring from the scene of action.

The Congress of Sovereigns were assembling at Verono, at the date of the last accounts. Nothing favorable to Greece, it is said, is expected to result from the deliberations of this body.

On Monday last, the election of Representatives to the next Congress, took place in this State. In *Suffolk* District, Mr. Webster is elected—in *Essex, North*. Mr. Nelson—in *Middlesex*, Mr. Fuller—in *Norfolk*, Dr. Eustis—in *Bristol*, Mr. Baylies—in *Plymouth*, Mr. Hobart.—In *Hampshire S.* Mr. Lathrop is probably elected, and Mr. Allen in *Hampshire N.* It is supposed no choice has been made in *Essex S.* and *Worcester N. and S.* Districts. The other Districts in the State not heard from.

Rapid Growth.—The following singular instance of the rapid growth of an engrafted scion, is worthy of notice, and will be interesting to virtuosos.

A Mr. Foster, of Scituate, grafted in his orchard, in May last, an apple tree, which in four months from the time the scion was set, bore an apple which girted 6 3-4 inches in circumference.—*Gazette.*

Mr. Coke, the rich and hospitable English Commoner, has discontinued his Annual Agricultural Festivals, where for so many years he had entertained many hundreds of the most distinguished friends of Agriculture, and Practical Farmers of England and of Europe. In a letter to one of his friends in America, he says, he has been compelled to reduce his rents thirty-three and a third per cent. and his tenants are known to be better able, than any others in England, to support the existing burdens on that class of British population.—*ibid.*

Premium offered.—The Emperor of Germany has lately offered a *thousand gold ducats*, equal to $2000, to the author, whether native or foreigner, for the best treatise on the construction of water mills.

A Velocipede, with two wheels, has been constructed in England, by which a person, with considerable ease, may travel six miles an hour.

NATHANIEL DEARBORN...*ENGRAVER*,

HAS removed to Market Street, No. 33, over Mr. Bailey's Store, West corner building of the stone steps passage way.

☞ Orders for Engraving and Printing Address or Visiting Cards; and engravings on Wood, Brass, or other metals solicited. Door Plates of any style and price, of Brass, Silver or Silver-plated. Nov. 2.

UNPRINCIPLED AMBITION.

BY T. G. FESSENDEN.

Ambition improperly directed, and destitute of principle, is a fruitful source of human misery, and causes most of the calamities of life. Many of its votaries, instead of rendering themselves notable become notorious, and obtain infamy in escaping obscurity. They cannot endure the idea of gliding silently down the stream of life into the gulf of oblivion, without leaving so much as a bubble or a ripple behind them; and therefore trouble the waters as much as possible during their passage from time to eternity. It is to be feared that there are more men like Eratostratus, who set fire to the temple of Ephesus for no other purpose than to preserve his name from oblivion, than like the "Man of Ross" who did good without seeking fame, and found that

"One self-approving hour whole years outweighs,
"Of stupid starers, and of loud huzzas."

But the man is happier both here and hereafter, who

"Along the cool sequester'd vale of life,
"Still keeps the noiseless tenor of his way,"

than he who "wades through slaughter to a throne," and "shuts the gates of mercy on mankind."

Dr. Darwin, in his elaborate work entitled *Zoonomia*, treats of Ambition as a disease, and thus describes its symptoms, and method of cure.

"*Ambition.*—A carelessness about the opinions of others is said by Xenophon to be the source of impudence; certainly a proper regard for what others think of us frequently incites us to virtuous actions, and deters us from vicious ones; and increases our happiness by enlarging the sphere of our sympathy, and by flattering our vanity.

Abstract what others feel, what others think,
All pleasures sicken, and all glories sink.....POPE.

"When this reverie of ambition excites to conquer nations or to enslave them, it has been the source of innumerable wars, and the occasion of great devastation of mankind. Cæsar is reported to have boasted that he had destroyed three millions of his enemies, and one million of his friends.

"The works of Homer are supposed to have done great injury to mankind by inspiring a love of military glory. Alexander was said to sleep with them always on his pillow. How like a mad butcher amid a flock of sheep appears the hero of the Iliad, in the following fine lines of Mr. Pope, which conclude the twentieth book.

His fiery coursers, as the chariot rolls,
Tread down whole ranks, and crush out heroes' souls.
Dash'd from their hoofs while o'er the dead they fly,
Black, bloody drops the smoking chariot dye:
The spiky wheels through heaps of carnage tore;
And thick the groaning axles dropp'd with gore.
High o'er the scene of death Achilles stood,
All grim with dust, all horrible in blood:
Yet still insatiate, still with rage on flame;
Such is the lust of never-dying fame!

"The cure must be taken from moral writers. Woolaston says Cæsar conquered Pompey; that is, a man whose name consisted of the letters C. æ. s. a. r. conquered a long time ago, a man, whose name consisted of the letters P. o. m. p. e. y. and that this is all that remains of either of them. Juvenal also attacks this mode of insanity. Sat. X, 166.

——— Idemens et sævas curre per alpes
Ut pueris placeas, et declamatio fias.

Which is thus translated by Dr. Johnson:

And left a name at which the world turn'd pale,
To point a moral, or adorn a tale."

If Dr. Cautic may be permitted to add any ingredients to Dr. Darwin's prescriptions, he will give the following moral

ANTIDOTES TO AMBITION.

When men of arrogance attempt to soar
Above the limits of their destin'd sphere,
Their every effort serves to sink them lower,
Curtail'd and baffled in their mad career.

Yet witless wights, in rash pursuit of fame,
Strive for pre-eminence of power and place;
Who, if they gain the rank at which they aim,
Become the heralds of their own disgrace.

Some fools are smitten with the love of dress,
And spend their little all to make a show;
Pride proves the cause and prelude of distress;
Attempts at high life bring the coxcombs low.

Some splendid sinners, proud of being vile,
For *genteel* vices high pretensions urge,
Enact the rake and debauchee in style,
And claim a wreath for meriting a scourge.

Some place their pride in wealth, by fraud obtain'd,
Cash, houses, lands, the purchases of guilt;
The conquerer boasts of battles he has gain'd,
And laurels drench'd in blood unjustly spilt.

All such vain-boasters glory in their shame,
The meed of vice no honor can bestow,
Impell'd by pride, bad eminence their aim,
They gain, at last, pre-eminence in woe.

From the Old Colony Memorial.

In the New England Farmer, Oct. 26th, are extracted from President Dwight's tour in New-England, some remarks on the *Beach Grass*, and its utility as manifested by its improvement on Cape Cod. The Editor requests "any friend or correspondent to furnish information relative to the above mentioned grass."

Little can be added to the judicious and critical remarks of the respectable tourist—but it may be remarked, that its production is not peculiar to Cape Cod; it grows spontaneously in all situations similarly constituted. It delights only on the open, exposed beach, and that constituted entirely of white sand, or pure silex, without any adhesive mixture; it is never seen on the adjoining meadows or upland, although within convenient distance to have its seed wafted on them by the wind—and it is believed to be incapable of being produced where there is any soil.

This harbor is defended from the sea by a beach on either hand, of similar formation; that on the north side, which extends from the Gurnett to Marshfield, three or four miles, is called Salt-house beach—that on the south side, and emphatically called the *Plymouth Beach*, extends from Monumet northerly about one mile and an half, and are both, more or less, covered with this grass; and so impressive is the opinion of its utility, that they are protected, and have long been, by special acts of the Legislature, preventing them being fed by the neighbouring cattle.

From the Vermont Republican and Yeoman.

ON WELLS.

As the preservation of health depends much upon the state and quality of the water in use, it is of the utmost consequence that no efforts should be spared to preserve it in its purest state. For this purpose I would strenously recommend the use of wells and *buckets*, although water may be obtained with much greater facility by the aid of *pumps*. As pumps very much lessen the manual labour in procuring water, they certainly answer valuable purposes, except for family uses. It is well known that motion constitutes the life, and conduces essentially to the purification of water. As pumps receive the water near the bottom of the well, by means of holes in the penstock, the water in the well undergoes very little agitation. This stagnant state of the water is soon accompanied with a disagreeable smell and taste; and the water becomes coloured. These changes not unfrequently are very erroneously imputed to the wood of which the pump is made, when, in reality they are all consequences of the stagnation of the water. Water in this state, becomes extremely unwholesome, and insalubrious, and is deprived of its most essential qualities for washing. How often have I lamented the ruin of excellent wells of water by the introduction of pumps! They, however, might be again restored to their former purity and sweetness, by the use of the bucket.—Good water may be designated by its transparency, and its exemption from smell or colour.

Although the motion of the water, produced by the bucket, is calculated to preserve its salubrity, still much care and vigilance are required in guarding against poisonous and nauseous reptiles which so frequently infest wells. Among others perhaps the lizard is as frequently an unwelcome tenant as any. This reptile sometimes grows to a large size, becomes spotted, and is reputed extremely venomous. The best method that I have ever discovered to destroy these troublesome animals, which more or less infest more wells, is the following: Put some vessel into the bucket, containing sulphur, with some combustibles, and after setting fire to these, lower the bucket into the well. If the well be deep, it may be necessary to recruit the fire a number of times, as the moist and dense air will serve to extinguish it. But if you succeed in filling the well with a strong sulphureous smoke, you will drive these animals from their haunts in the walls to the bottom of the well, from whence they may be easily taken when the smoke subsides.

Wells that have ever been good, may again be restored, by often exhausting the water.—The more water is taken from wells, the purer and better the water.

Suppose that a farmer consumes thirty cords of wood yearly—A green cord of wood is computed to weigh fifty-six hundred weight, and a cord of dry wood thirty-eight hundred weight:—It appears, he that sleds green wood sleds twenty seven tons of water more than the other; and when we come to reflect that it often times happens in our hill towns that they sled the wood half a mile up hill—surely it is time farmers began to think about things that differ, and work head work as well as hand work, if they would thrive.—*ibid.*